

NEW SPECIES OF HETEROCERA FROM  
SOUTH AMERICA

BY W. SCHAUS

The following descriptions are mostly of species recently received. Where not otherwise stated the specimens were given to me by my friend, Mr. Julius Arp, of Rio de Janeiro.

## Family AMATIDÆ

**Correbidia joinvillea**, new species.

*Male*.—Palpi black, the first and second joints streaked below with orange buff. Frons black, vertex and collar orange buff with a medial black line. Thorax black; patagia orange buff. Abdomen black, shaded with brown dorsally on basal segments and with some yellow buff lateral hairs at base. Fore wings orange buff; a large terminal black spot from cell thickly irrorated with steel blue; interspaces between veins 4 and 6 without irrorations except on veins; veins 1, 2, 3, orange buff with black streaks on interspaces; some black dusting antemedially in cell, and below it, and a large black streak on inner margin. Hind wings thinly scaled, smoky, darkest on inner and outer margins; costa straw yellow, not reaching apex. Fore wings below paler, the markings reduced. Hind wings below tinged with yellow, the marginal shading reduced; costa fuscous with basal and postmedial yellow spots.

Expanse 31 mm.

*Habitat*.—Joinville, South East Brazil.

*Type*.—Cat. No. 24901, U. S. Nat. Mus.

Near *C. elegans* Druce, the apical patch larger, the apex more produced; the hind wing is entirely smoky.

**Ctenucha pohli**, new species.

*Male*.—Palpi black, second joint below yellow buff; first joint below and throat orange. Head and thorax black; collar and patagia gray black all with a medial white line. Abdomen blue black, dorsally shaded with dull fuscous brown cut by faint blue segmental lines; anus orange; venter white, legs black streaked with white. Fore wings black, veins duller on

basal half; the submedian fold and vein finely whitish, but not reaching termen; a white ovate spot beyond cell from veins 4-7, its outer edge slightly indentate on veins 5 and 6. Hind wings black shot with dark blue; cilia white. Fore wings below black; the white spot as above; a white streak below cell at base. Hind wings below black shot with blue; a white line through cell from base to beyond discocellular; a faint white line on submedian fold; the inner margin broadly paler tinged.

Expanse 39 mm.

*Habitat*.—Rio Doce, Province Minas, Brazil.

*Type*.—Cat. No. 24902, U. S. Nat. Mus.

Fore wings above like *C. mortia* Schaus; differs below in the white streaks on both wings.

Received from Mr. Bruno Pohl.

### ***Hyalucerea grandis*, new species.**

*Male*.—Head, collar, thorax below and anus mars yellow. Thorax above, legs and tips of palpi black. Abdomen black, shot with dark blue. Fore wings fuscous brown, the veins darker; a broad space below costa to near termen shot with dark blue. Hind wings hyaline, the veins black; margins very broadly blue black. Wings underneath shot with blue green.

Expanse 62 mm.

*Habitat*.—Ecuador.

*Type*.—Cat. No. 24903, U. S. Nat. Mus.

Quite unlike any other species.

### Family LITHOSIIDÆ

### ***Progona venata*, new species.**

*Male*.—Palpi yellow. Frons dark gray, vertex and collar deep yellow, the latter shaded with gray. Thorax dark gray. Abdomen above black brown the anal segment brownish gray; underneath yellow. Legs fuscous, coxæ with yellow spots. Fore wings above benzo brown, the costal margin orange yellow, the veins finely yellowish. Hind wings black, the cilia grayish. Fore wings below fuscous; costal margin orange

yellow; inner margin yellowish; veins terminally finely yellowish. Hind wings below black; base of costa and terminal line yellowish.

Expanse 25 mm.

*Habitat*.—Trinidad, Paraguay.

*Type*.—Cat. No. 23904, U. S. Nat. Mus.

Received from Mr. Pedro Jorgensen.

#### Family ARCTIIDÆ

#### *Idalus panamensis*, new species.

*Male*.—Palpi dark brown above, a lateral white line, and drab fringe below. Head and collar light drab; some white on frons. Thorax and patagia cinnamon drab; some orange hairs on patagia in front and outwardly. Abdomen above ochreous orange; anus and venter white. Fore wings with basal area cinnamon drab; costal and inner margins irregularly whitish; gray and orange hairs at base; an antemedial white point; pale luteous hairs at base of inner margin and some black scaling medially; a fine dark line from cell between veins 2 and 3 to postmedial shading; a similar line below vein 2 from cell to near termen, also a line above submedian vein, and one below submedian, the latter shorter and medial; the veins on basal area slightly darker than ground color; a transverse straight black line just beyond discocellular; a large whitish semihyaline space beyond cell to postmedial shade this space extends from subcostal and base of vein 7 to vein 3, its lower edge irregular, its outer portion with diffuse drab postmedial shadings and streak projecting inwardly, the shading outwardly lunular, with a dark spot in each lunule on the otherwise light drab terminal space; the veins on outer area finely dark brown; faint darker vertical streaks on interspaces terminally. Hind wings white; inner margin pale yellow; veins 2, 3 and 5 drab; tips of veins darker; cilia tipped with fuscous gray. Wings below white; fore wings with a black crescent on discocellular, the latter white, also three subapical black spots, the largest between veins 5 and 6.

Expanse 35 mm.

*Habitat.*—Rio Trinidad, Panama.

*Type.*—Cat. No. 24905, U. S. Nat. Mus.

Collected by Mr. A. Busck.

***Idalus tumara*, new species.**

*Female.*—Palpi gray with a lateral black streak, and fringed below with white, also with begonia rose at base. Head white. Collar white with rose irrorations behind. Thorax white, the patagia mottled with rose and with an orange yellow spot. Abdomen above begonia rose, the last two segments white; dorsal white spots and a few segmental lines; underneath white; legs mostly white; fore tibiæ gray; fore coxæ and lines below shoulders rose color. Fore wings maize yellow; costal margin white, not reaching apex; inner margin narrowly white; cilia white; two short black streaks at base of costa; two black streaks in basal half of cell; a shorter streak below cell, and obliquely placed points above and below submedian; some rose color at base below cell, expanding on inner margin. A postmedial transverse black fascia, cut by whitish gray veins, the fascia inbent from costa to median and vein 5, then vertical to inner margin and of uniform width; vein 11 is white and there is a white line on interspaces below costal vein; below cell the fascia is edged with white; a subterminal black spot above vein 5. Hind wings white. Wings underneath white, the fore wings showing the black fascia in transparency, also the subterminal spot.

Expanse 34 mm.

*Habitat.*—Rio Potaro, British Guiana.

*Type.*—Cat. No. 24906, U. S. Nat. Mus.

Near *I. agrīca* Dyar.

Received from Mr. S. E. Cassino.

***Prumala suanoides*, new species.**

*Female.*—Body above mustard yellow, the vertex, collar and dorsal tufts on abdomen darker shaded; underneath yellowish white. Fore wings mustard yellow; costal edge faintly tinged with lilacine; indistinct grayish postmedial points above and

below veins 5 and 2; a very small grayish spot at tornus. Hind wings thinly scaled, white faintly tinged with yellow.

Expanse 40 mm.

*Habitat*.—El Sitio, Costa Rica.

*Type*.—Cat. No. 24907, U. S. Nat. Mus.

Near *P. suana* Druce and *P. indistincta* Rothschild, the markings still more reduced than in the latter species.

Collected by Barnes and Schaus.

### *Zatrephes novicia*, new species.

*Female*.—Palpi crimson above, white below. Head, collar, and thorax ochraceous buff thickly irrorated with crimson; abdomen cream color with dorsal crimson mottling at base. Fore wings cinnamon irrorated with crimson; a postmedial flesh colored point above vein 6, and a similar small crescent below vein 5. Hind wings cream color, the termen slightly tinged with crimson. Wings below cream color, the apex and termen of fore wing faintly darker tinged.

Expanse 35 mm.

*Habitat*.—St. Jean, Maroni River, French Guiana.

*Type*.—Cat. No. 24908, U. S. Nat. Mus.

Near *Z. dithyris* Hampson, distinguished by its more uniform fore wing and pale hind wing.

Collected by Barnes and Schaus.

### *Zatrephes ignota*, new species.

*Male*.—Palpi brown above, white below. Head and collar white. Thorax and abdomen above cream color, underneath white. Fore wings cream color, with grayish striæ on terminal portion except on apical space; traces of an inbent fine brownish antemedial line; traces of a medial line formed by striæ at end of cell, on submedian and a line below it; a dark brown, fine, postmedial line oblique on costa, curved between veins 6 and 7, then inbent and lunular to vein 3 forming the inner edge to a series of hyaline spots from veins 6 to 3, the longest spot between veins 4 and 5, all with their outer edges incurved; a short oblong spot above vein 6, and a smaller oval spot above vein 7; cilia from vein 5 to apex mottled with dark



brown. Hind wings maize yellow. Wings below cream color with faint striæ terminally on fore wing.

Expanse 30 mm.

*Habitat*.—Unknown, probably from the Amazons.

*Type*.—Cat. No. 24909, U. S. Nat. Mus.

Near *Z. flavida* Hampson.

***Amaxia corata*, new species.**

*Male*.—Palpi, head, collar and thorax vinaceous fawn; palpi beneath white. Abdomen above scarlet. Body below white; legs white; fore coxæ tipped with dark brown. Fore wings with the basal area from before middle of costa to vein 2 at termen vinaceous fawn, crossed by darker broad striæ; a line of small black spots subbasally from below cell to inner margin; cilia at base of inner margin roseate; the outer edge of basal space crosses the wing obliquely beyond cell, is vertical from vein 5 to vein 3, then down curved to vein 2; apical portion of wing semihyaline white, the veins with numerous dark points; the costal margin white; near apex the white extends below costa, and is edged behind by a vinaceous fawn line, down curved from subcostal to vein 7 where it is toothed towards termen, incurved and outbent to termen just below apex. Hind wings pale rose color the costal margin white; a large glandular spot in cell. Fore wings below with only basal area opaque; costa white to a brown streak at apex; inner margin broadly gray white; a brown line in cell, expanding to a transverse brown spot at end; a roseate space below cell with round fovea; edging of basal area pale salmon pink. Hind wings below pale roseate, the costal margin broadly white.

Expanse 30 mm.

*Habitat*.—Joinville, South East Brazil.

*Type*.—Cat. No. 24910, U. S. Nat. Mus.

The hind wing has veins 3 and 5 coincident, 4 absent, 6 and 7 on short stalk, 8 from near end of cell.

***Araeomolis canalis*, new species.**

*Male*.—Palpi, head and collar white, the different parts

spotted with light cinnamon drab. Thorax brown; patagia light cinnamon drab edged with white. Abdomen yellow, the last four segments black; some dark gray tufts at base; underneath white. Legs white; fore coxæ and streaks on fore tibiæ light cinnamon drab. Fore wings cinnamon drab; costal, a streak below it, subcostal, median, discocellular, submedian and veins 2, 3, 4, white; tips of veins 5, 6, 7, 11, white; a white line along inner margin; a subbasal curved white line; an inbent thick white antemedial line expanding below cell with a projecting line on fold; a white spot medially in cell; a postmedial line of white points, curved below costa and inbent to middle of inner margin. Hind wings thinly scaled light cinnamon drab. Fore wings below with white postmedial punctiform line, and the veins terminally white.

Expanse 32 mm.

*Habitat*.—Canal Zone, Panama.

*Type*.—Cat. No. 24911, U. S. Nat. Mus.

Veins 3 and 5, and 6 and 7 on hind wing well stalked.

The fore wing looks superficially like *Automolis pulverosa* Schaus.

#### ***Automolis pretiosa*, new species.**

*Female*.—Palpi and head brown black. Frons metallic blue. Collar and thorax apricot orange; a dorsal black line from vertex to abdomen. Abdomen black with dorsal and lateral blue spots; some sublateral white points on abdomen underneath near base. Legs fuscous brown. Fore wings apricot orange; costal margin to beyond middle blue black with a fine white line on costa, one below, and one on subcostal; apex and outer margin broadly blue black, narrowing on inner margin and not reaching base; an oblique blue black stripe from costa beyond middle to outer margin, following vein 4, the orange space beyond well rounded above, almost straight below, leaving the costa very narrowly black. Hind wings blue black; costa and cell with an orange yellow spot from base to just beyond middle of wing. Underneath similar.

Expanse 43 mm.

*Habitat*.—Joinville, South East Brazil.

*Type*.—Cat. No. 24912, U. S. Nat. Mus.

This species is closely allied to *A. chrysomelas* Walker, and differs in the darker coloring and broader black margins.

***Automolis iheringi*, new species.**

*Male*.—Head and palpi black, the frons and vertex shaded with dark metallic blue; lateral orange yellow lines beyond antennae; collar and thorax black; orange yellow stripes across collar and patagia, leaving only edges of latter black. Abdomen black dorsally shaded with fuscous blue; brighter blue scales on anus; large orange yellow paired spots ventrally on three basal segments; legs black, the coxæ metallic blue. Fore wings dark purplish brown, the costal margin black; an orange yellow stripe from inner margin near base to close to termen just above vein 6, dully pointed at its extremity, the veins on dark portion of wings grayish. Hind wings black, the costal margin broadly yellow. Fore wings below black, the stripe as above, paler. Hind wings below black with a broad yellow fascia below costa which remains black.

Expanse 39 mm.

*Habitat*.—São Paulo, South East Brazil.

*Type*.—Cat. No. 24913, U. S. Nat. Mus.

Distinguished by the black costal margin of fore wings above and the black costal margin of hind wings underneath.

Received from Mr. H. von Ihering.

***Automolis temperata*, new species.**

*Male*.—Palpi fuscous with a white streak underneath and a small white spot above. Body above primuline yellow; lower part of frons dark metallic blue; a blue black dorsal line from vertex to anus, widest on tegulæ and terminal half of abdomen; a black line from head across shoulders and outer part of patagia. Abdomen below paler with a lateral black line. Thorax below black, at sides yellow; legs black streaked with white; fore coxæ yellow. Fore wings primuline yellow; a black fascia from base below costa to apex above vein 8; the basal third of subcostal cream color; some blue black scales at base; inner margin black from one third from base to termen



close above vein 3, this black space narrowing at each end. Hind wings with the costal half primuline yellow, the anal half black. Wings below similar.

Expanse 38 mm.

*Habitat.*—Orizaba, Mexico.

*Type.*—Cat. No. 24914, U. S. Nat. Mus.

Near *A. taeniata* Guerin with the yellow predominating instead of the black.

Collector Schaus.

### *Amastus opharina*, new species.

*Female.*—Palpi and frons fuscous brown; vertex gray brown. Collar and patagia wood brown; small round black spots on tegulæ; a fine black line on patagia; thorax orange yellow with a broad black medial line. Abdomen above paler yellow with fine black segmental lines; a broad fuscous dorsal shade narrowing at base and terminally; underneath white; a broad black ventral stripe except on last two segments; a broad lateral dark gray stripe edged below by a fine black line. Legs inwardly gray brown, outwardly whitish, tarsi gray brown. Fore wings thinly scaled in disc, light brownish gray shading to wood brown terminally and crossed by fine brownish striæ; a wood brown shade at base mixed with black; a quadrate wood brown patch at end of cell and beyond from vein 4 to costa outwardly edged by a finely wavy black line from vein 5 to costa; costal margin from basal shade to quadrate patch with three light brownish gray spots and two wood brown spots; inner margin broadly dark brown narrowing to tornus; an irregular row of small subterminal semihyaline gray spots, very indistinct. Hind wings semihyaline grayish white, the margins broadly shaded with grayish brown; discocellular darker shaded. Wings below pale grayish with brown irrorations; a vague and large fuscous shade at end of cell on fore wing.

Expanse 65 mm.

*Habitat.*—Nova Friburgo, Brazil.

*Type.*—Cat. No. 24915, U. S. Nat. Mus.

**Halisidota costistrigata**, new species.

*Male*.—Palpi scarlet with black spots at base of second and third joints. Head, collar, and throat scarlet; patagia black with a central white line extending over shoulders. Abdomen black; a dorsal scarlet tuft at base; last three segments pale scarlet the first crossed by a black line; a lateral white line. Legs black with broad scarlet bands; tarsi scarlet with black rings. Wings black faintly tinged with blue; cilia tipped with white; fore wings with a short white line below costal vein at base. Wings underneath duller, without the white costal line.

Expanse 36 mm.

*Habitat*.—Caldas, Province Minas, Brazil.

*Type*.—Cat. No. 24916, U. S. Nat. Mus.

Veins 6 and 7 on hind wings stalked.

Very much like *H. dukinfieldia* Schaus which has no white streak at base of costa and also has veins 6 and 7 on hind wing from upper angle of cell.

**Ecpantheria jaguarina**, new species.

*Male*.—Palpi blue black, fringed with white below. Frons fuscous blue, vertex white. Collar white with large gray spots edged with black. Thorax white with paired black-blue lines in front, and similar spots posteriorly, also a medial dorsal spot; patagia whitish gray suffused with fuscous in front, outlined with blue black and with long white fringe. Abdomen above blue black, underneath white with black transverse line at base and terminally; a broad dark orange lateral line edged below with blue black. Fore wings white, the spots where not otherwise stated gray edged with black; a subbasal quadrate spot on costa, and an obliquely ovate spot below cell; an antemedial spot on costa oblique and outangled, its edging inangled suffusing with a very oblique outbent line in cell which in turn connects with the uppermost of three antemedial spots inbent to inner margin; a medial triangular spot on costa, its apex entirely blue black in end of cell above a thick black horizontal streak; four medial quadrate spots from below streak inbent to inner margin; discocellular in-

curved cream color, followed by a black lunule; short black streaks at cell above and below vein 4 suffusing with the thick cellular streak; a postmedial outcurved row of spots, the costal spot largest and suffusing with the spot above vein 6; the spots between veins 6 and 4 smaller; a subterminal series of spots, those above and below vein 8 suffusing and entirely black, the spot below vein 7 small, round, black; a black streak below vein 6; a small triangular spot below vein 5, the spots below this increasing in size to inner margin, those above and below submedian entirely black; a marginal row of small round spots on interspaces those from vein 5 to apex irregular in shape. Hind wings white; a streak of black hairs before inner margin; a small black spot in cell, and one on angle of discocellular; a postmedial small black spot above vein 7; medial and postmedial black spots on costa. Fore wings below almost the same as above; the cellular streak suffusing with antemedial spots. Hind wings below white; the medial costal spot suffusing with spot in cell; a black spot at anal angle also present above.

Expanse 65 mm.

*Habitat.*—Joinville, South East Brazil.

*Type.*—Cat. No. 24917, U. S. Nat. Mus.

The horizontal streak across the discocellular is a marked character of this species.

### *Ecpantheria flavopunctata*, new species.

*Female.*—Head and thorax fuscous; some brown hairs on frons, and luteous hairs on vertex; tegulæ dorsally edged with luteous and crossed by an oblique luteous line from head; some fine luteous streaks on thorax and a wavy line on patagia. Abdomen above blue black, a dorsal and a lateral series of small orange spots; underneath dull black and with small yellow ventral paired spots, not reaching last segments. Fore wings fuscous crossed by series of black spots very finely edged with yellowish scales; basal, antemedial, medial, postmedial and subterminal series; small terminal spots, except the spot between veins 6 and 7 which is larger. Hind wings fuscous;

oblique yellow spots on costa, and a fine line at apex. Fore wings below paler, the spots visible in transparency. Hind wings below fuscous; a horizontal streak at base on costa, a medial spot, an oblique postmedial line and a fine apical line, all orange yellow.

Expanse 52 mm.

*Habitat.*—Trinidad, Paraguay.

*Type.*—Cat. No. 24918, U. S. Nat. Mus.

Allied to *E. indecisa* Walker. The yellow costal spots of hind wing are very conspicuous.

Received from Mr. Pedro Jorgensen.

### **Tessellota jorgenseni**, new species.

*Female.*—Palpi orange with a small brown spot above. Frons dark brown; vertex, collar, and thorax white; some orange shading behind vertex. Abdomen above orange yellow, the anal segment white; dorsal and lateral row of black spots. Body below white; throat and fore coxæ orange yellow; fore tibiæ gray; mid tibiæ with gray spots. Fore wings white, the lines buffy brown; two converging lines at base on costal margin, diverging below cell; antemedial geminate lines forming small quadrate spots between veins; a geminate oblique line medially across costa and cell suffusing below with a large buffy brown space, which is rather narrow from costa to vein 5, and then expands to tornus and inner margin to near base, its edges rather irregular; an irregular geminate postmedial line from costa to vein 3 filled in with yellow buff; a lunular subterminal line and a similar terminal line extending on cilia. Hind wings white, buff brown points on discocellular, and a similar large spot on termen near anal angle. Wings below similar, but duller.

Expanse 31 mm.

*Habitat.*—Trinidad, Paraguay.

*Type.*—Cat. No. 24919, U. S. Nat. Mus.

Closely allied to *T. sertata* Berg.

I take pleasure in naming this species after my friend, Mr. Pedro Jorgensen.

## Family SATURNIIDÆ

*Periga oculata*, new species.

*Male*.—Body above pale orange yellow, the collar and front of thorax slightly darker. Fore wings pale orange yellow; a fine brown antemedial line, outcurved and dentate across cell, incurved below cell, outbent on vein 1, then vertical to inner margin. A large gray spot at end of cell, circled by a black line and containing some black scales; a fine whitish line, faintly lunular, and with some fuscous gray shading from apex to inner margin at two thirds from base, being outwardly shaded with orange from vein 5, this shade expanding to inner margin; a subterminal series of fuscous lunules on interspaces. Hind wings pale orange yellow; a streak of orange hairs before inner margin; traces of an outer line from costa before apex; a subterminal darker line, dentate between veins 4 and 3, and 3 and 2. Wings below yellow irrorated with reddish brown; fine black lines on discocellulars; fore wings with a fine reddish brown line from apex to inner margin beyond middle; hind wings with a similar line from apex to inner margin nearer middle.

Expanse 40 mm.

*Habitat*.—Minas, Brazil.

*Type*.—Cat. No. 24920, U. S. Nat. Mus.

Near *P. circumstans* Walker.

*Hylesia minasia*, new species.

*Male*.—Head cinnamon rufous. Collar and thorax dark purple drab; some cinnamon hairs in front of collar. Abdomen above black, the base hazel, the anal segment cinnamon. Body below pale cinnamon, the fore legs purple drab. Fore wings pallid purple drab; base broadly shaded with dark purple drab except on costa, limited by a slightly darker antemedial tint, vertical but inangled in cell, closely followed by a fuscous parallel medial line from subcostal to inner margin; a fuscous streak on discocellular; postmedial brownish drab slightly curved on costa then almost vertical to inner margin; a broad subterminal purple drab shade only slightly darker



than ground color; cilia except at apex and tornus darker. Hind wings light grayish vinaceous, the termen tinted with pallid purple drab. A very faint postmedial drab line, and a darker better marked subterminal line. Wings below duller without markings.

Expanse 42 mm.

*Habitat.*—San Lourenco, Minas, Brazil.

*Type.*—Cat. No. 24921, U. S. Nat. Mus.

The only allied form I know is an undescribed species in collection Dognin.

Received from Mr. E. May of Rio de Janeiro.

#### Family CERATOCAMPIDÆ

#### *Adelocephala subfumata*, new species.

*Male.*—Head and thorax avellaneous with a fuscous dorsal line on collar and thorax. Abdomen dorsally red, otherwise avellaneous. Fore wings avellaneous; lines fine, fuscous; antemedial line slightly outbent, and lunular, inangled above submedian, followed by a black transverse line in cell; a small black point at end of cell; postmedial line inversely lunular from costa before apex to above submedian where it is out-curved to inner margin at two thirds from base; the two lines are connected by a short black streak above submedian; a faint medial curved brownish shade from middle of costa to middle of inner margin; an irregular subterminal series of fuscous spots. Hind wings avellaneous, the cell, below it, and beyond to termen somewhat browner; a postmedial lunular fuscous line; subterminal fuscous spots more heavily marked than on fore wing. Fore wings below buff, the costal margin shaded with purple; the subterminal line not so deeply lunular as above. Hind wings long and narrow, the costa highly arched at base; more than half the wing anteriorly fuscous purple, crossed by a broad antemedial lilacine shade; a white point at end of cell; posterior portion of wing avellaneous; a wavy dark postmedial line, and traces of subterminal spots.

Expanse 50 mm.

*Habitat.*—Joinville, South East Brazil.

*Type*.—Cat. No. 24922, U. S. Nat. Mus.  
Quite unlike any described species.

Family NOTODONTIDÆ

*Lusura speciosa*, new species.

*Male*.—Palpi reddish brown, darkest above and with a white tuft above at base of third joint. Frons brown becoming white towards palpi; vertex and tufts mottled brown, black, and white. Collar and sides of thorax deep olive gray. Abdomen dark brown above, whitish underneath. Fore wings with the costal margin to near apex and cell to medial line cinnamon rufous, the inner margin broadly deep olive gray, the termen dull olive gray; a black line below subcostal to medial line, but bifurcating beyond base, the lower branch being dark reddish brown; a claret brown line from base edges the gray inner margin and is interrupted at medial line by a small white semilunar mark, beyond which it is downbent and toothed before reaching tornus, then upbent and incurved obliquely with a short tooth at vein 4, then nearly reaches termen at vein 7 and is inbent to costa, leaving a gray spot on costa at apex; where angled at vein 7 a fuscous spot follows to apex which appears like a continuation of the line; the medial line is fuscous brown preceded by a narrow dark shade in cell and followed by a claret brown velvety line, punctiform, edged with white on costa; from cell veins 4–6 are fuscous with grayish streaks above and below vein 5; postmedial space between 2 and 4 purplish brown; traces of a postmedial fine line crossing a white spot on costa, and traces of another line well beyond it; the inner margin is crossed by fine, geminate antemedial and postmedial lines. Hind wings white, the inner margin broadly dark brown, the termen very narrowly shaded with brown. Wings below whitish the apex and termen of fore wing shaded with brown.

Expanse 35 mm.

*Habitat*.—Joinville, South East Brazil.

*Type*.—Cat. No. 24923, U. S. Nat. Mus.

**Lusura ancha**, new species.

*Female*.—Head and thorax mottled gray and fuscous. Abdomen above fuscous gray, the basal segment orange brown. Body below avellaneous. Wings fuscous gray. Fore wings: a geminate black brown basal line on costa; a short black streak on median and one below it; very faint traces of antemedial line; a fine, faint, medial line slightly wavy, closely followed by a fine distinct black line from costa to below cell where it is edged with whitish and does not reach submedian fold; a short dark streak connects this line with a black lunule near end of cell; two dark points on discocellular followed by four small whitish spots; a black postmedial line outbent from costa to vein 6, then inbent and macular, the spots somewhat triangular and followed by whitish gray indistinct spots on interspaces; a subterminal wavy black line, the veins partly streaked with black; cilia grayish, on inner margin medially tipped with black. Cilia on hind wings white with dark spots at veins. Wings underneath grayer without markings; the costa of fore wing narrowly cream color; cilia white with dark points on both wings.

Expanse 40 mm.

*Habitat*.—Trinidad, Paraguay.

*Type*.—Cat. No. 24924, U. S. Nat. Mus.

Wings broader than in the other species of this genus, and the general character of markings different.

Received from Mr. Pedro Jorgensen.

**Hemiceras sericilinea**, new species.

*Male*.—Body above pale buff, underneath whitish buff. Palpi brown above, white below. Frons brownish irrorated with white; a white line behind and white tufts at base of antennæ. Vertex cinnamon brown. Collar antimony yellow. Legs mostly white, the tarsi brown. Fore wings pale buff, silky, thinly irrorated with reddish brown, the inner margin straight; costal margin finely orange brown; a fine antemedial orange brown line, vertical, not reaching costa or inner margin; a small brown spot at end of cell circled with fuscous brown;

outer line from apex to middle or inner margin, orange brown, inwardly shaded with gray brown, outwardly edged with whitish buff; subterminal points at veins 3 and 4; cilia dark orange brown. Hind wings whitish, the termen and base of cilia tinged with brownish ochre which extends upwards along inner margin. Wings below buff white, the spots and outer line of fore wing showing through; cilia of fore wing dark orange brown, of hind wing white. No fovea.

Expanse 45 mm.

*Habitat*.—Petropolis, Brazil.

*Type*.—Cat. No. 24925, U. S. Nat. Mus.

Near *H. leucospila* Walker.

What I consider the female has the fore wing slightly darker, the antemedial line slightly inbent and only a few brown scales at end of cell instead of the annular spot; the postmedial line is similar to that line in the male, also the cilia. Hind wings yellowish white without terminal shading, the vertex and collar darker brown, the legs light brown, also the palpi below. Underside as in male.

Expanse 53 mm.

*Habitat*.—Nova Friburgo, Brazil.

### **Hemiceras pohli**, new species.

*Male*.—Palpi dark reddish brown above, whitish buff underneath. Frons lilacine gray. Thorax and fore wings deep olive buff irrorated with reddish brown, front of collar brown. Abdomen above reddish brown. Body below whitish buff. Fore wings: antemedial line vertical, faintly yellowish with black points on veins; a round dull gray spot at end of cell; outer line from apex to middle of inner margin faintly yellowish with reddish and black points on veins, inwardly shaded with dull fuscous gray beyond cell, and similar shadings on termen. Hind wings whitish, the veins and termen broadly shaded with reddish brown; a dark brown fovea at vein 2. Fore wings below whitish shaded with red, disk brown except at apex and on inner margin. Hind wings below whitish.

Expanse 44 mm.

*Habitat*.—City of São Paulo, South East Brazil.

*Type*.—Cat. No. 24926, U. S. Nat. Mus.

The inner margin of fore wing is straight. This species can be placed near *H. leucospila* Walker.

Received from Mr. Bruno Pohl.

#### Family LIPARIDÆ

##### **Trochuda amalita**, new species.

*Male*.—Head, collar and thorax vinaceous cinnamon, the thorax posteriorly more purplish. Abdomen white, the dorsal tufts pinkish. Fore wings vinaceous cinnamon crossed by two straight fine brownish lines; the inner line slightly inbent from costa, the outer line from apex to just beyond middle of inner margin. Hind wings white, the termen broadly shaded with roseate. Fore wings below paler, the inner margin white; only the outer line which is fuscous and broader. Hind wings below pale buff, the inner margin broadly white; a fine dark postmedial line, curved below apex, not extending below vein 2.

Expanse 30 mm.

*Habitat*.—Nova Friburgo.

*Type*.—Cat. No. 24927, U. S. Nat. Mus.

The lines as in *T. impura* Schaus, but the color quite different.

#### Family MEGALOPYGIDÆ

##### **Megalopyge flavivertex**, new species.

*Male*.—Antennæ with basal third of shaft brown, beyond white, the pectinations brown tipped with white. Palpi and throat black; frons whitish gray with lateral black lines; vertex bright yellow; collar black broadly edged behind with bright yellow. Thorax black. Abdomen gray black; the base dorsally black, the four medial segments dorsally with transverse white bands. Legs fuscous with whitish gray shadings. Fore wings fuscous on basal half, with fine white lines, two on costa not reaching base, two in cell, and three below cell between median and submedian veins, these last three shorter, outlining two small elongated spots; a velvety black spot at



end of cell; this basal half is limited by a white line vertical from costa to vein 5, inbent to vein 3, and slightly outbent to inner margin, and inwardly heavily shaded with black except between veins 5 and 3; outer space white with fuscous gray lines above and below veins, suffusing before touching termen. Hind wings white, the base, inner margin, and veins terminally fuscous gray. Fore wings below with the outer area whiter, only the lines at apex very distinct. Hind wings below with the basal area darker than above; cilia fuscous on all the wings.

Expanse 35 mm.

*Habitat.*—São Paulo, South East Brazil.

*Type.*—Cat. No. 24928, U. S. Nat. Mus.

Very similar to *M. lampra* Dyar from Mexico. The black markings more intense, the spots on the vertex and collar bright yellow instead of white.

Received from Mr. Bruno Pohl.

## NEW SPECIES OF JAPANESE CRANE-FLIES

### PART II

(*Diptera, Tipulidæ*)

By CHARLES P. ALEXANDER

The undescribed species of crane-flies discussed in this paper were included in material sent to the writer for determination by Dr. T. Shiraki. The specimens are mostly from Teshio, northern Hokkaido, and were collected by Mr. T. Isshiki. My sincere thanks are extended to Dr. Shiraki and Mr. Isshiki for the privilege of studying these collections. The types are preserved in the collection of the writer; additional specimens are in the Entomological Collection of the Agricultural Experiment Station of Formosa.

There are a few names of Oriental Tipulidæ that require to be changed since they are primary homonyms of earlier names in the same family. These homonyms were created by Brunetti. The writer had notified Mr. Brunetti of this fact but as he does not consider it necessary to re-name these forms (Rec. Ind. Mus., vol. 15, p. 274, 1918), it devolves upon the